



# Rethinking mental health: why policies must go beyond health care to take a public health approach

Mauricio Avendano, PhD, FBA

University of Lausanne, Unisanté
Harvard University

Swiss Public Health Conference, 10 Sept 2025, Lugano









### **Outline**

- 1. A public health approach to mental health what it means and why it matters
- 2. Public policies and mental health four case studies
- 3. Conclusion and implications









### Outline

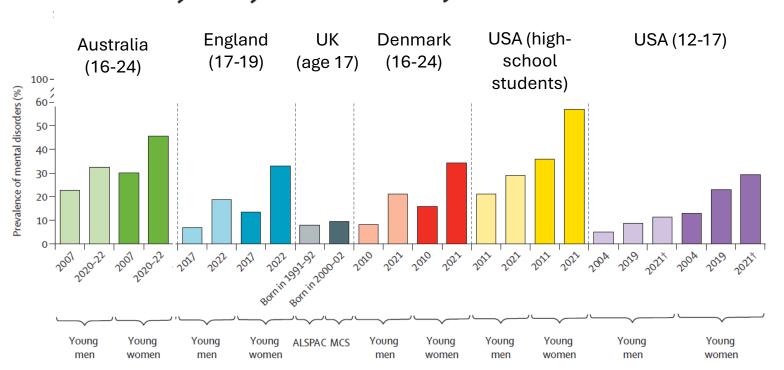
- 1. A public health approach to mental health what it means and why it matters
- 2. Public policies and mental health four case studies
- 3. Conclusion and implications



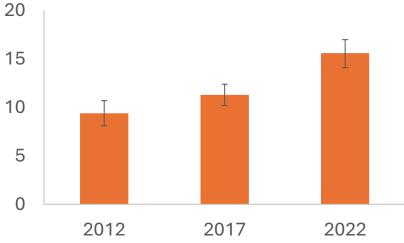


## A mental health crisis? Youth mental health trends by country and sex

#### The Lancet Psychiatry Commission on youth mental health



Moderate or severe depression symptoms, Switzerland, 15-34



Source: OFS – Enquête suisse sur la santé (ESS), OBSAN

Source: McGorry e al, Lancet Psychiatry 2024; 11: 731–74

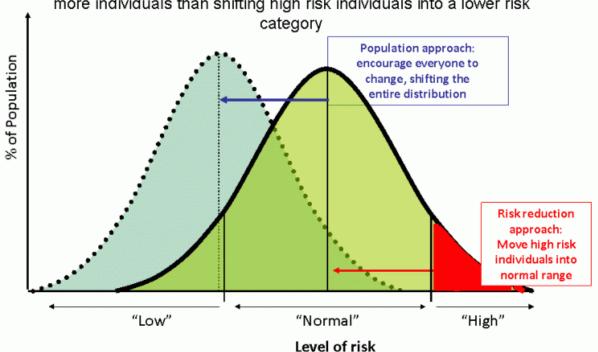
How can a public health approach help us address
mental health trends?

## A public health approach: Geoffrey Rose



#### The Bell-Curve Shift in Populations

Shifting the whole population into a lower risk category benefits more individuals than shifting high risk individuals into a lower risk

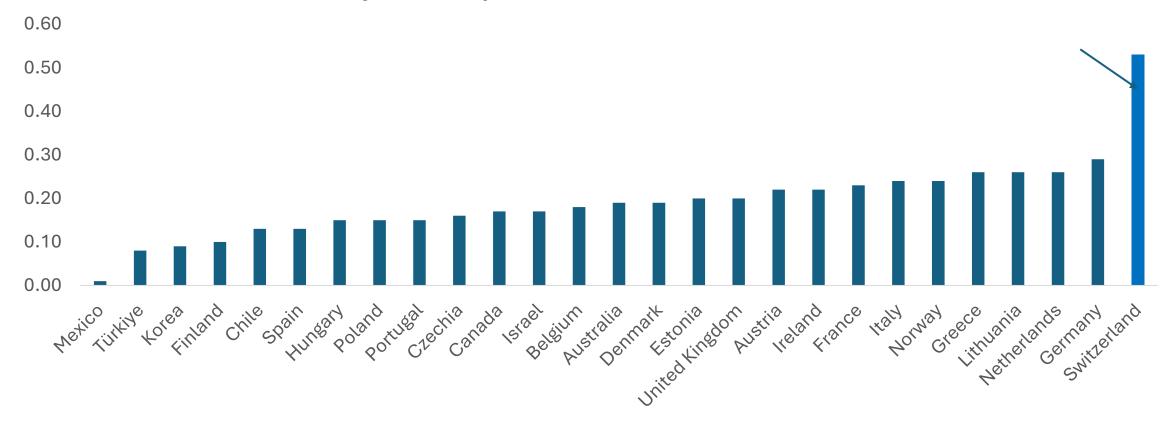


- Widespread, society-wide interventions prevent more cases than strategies that target high-risk individuals
- Emphasise distribution of risk: shift entire population risk profile (not just extremes)

Source: Rose G. Sick Individuals and sick populations. Int J Epidemiol. 1985; 12:32-38.

## Very high rates of psychiatrists in Switzerland, 2023







## What are the causes of population mental health?

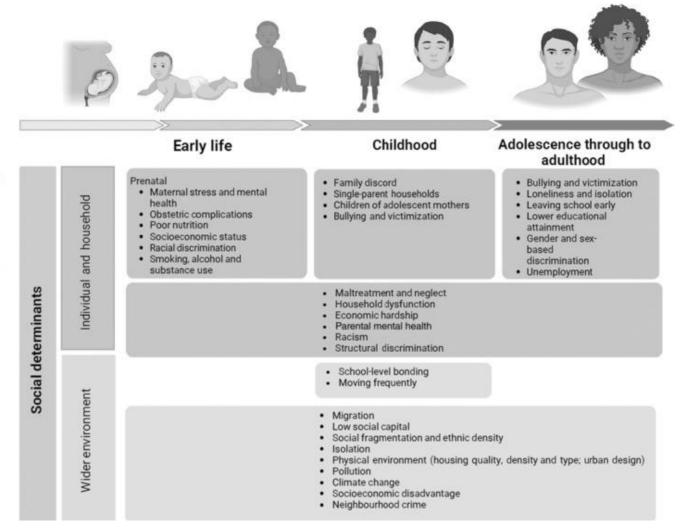


Forum – Social Determinants of Mental Health and Disorder, and Effective Prevention Strategies



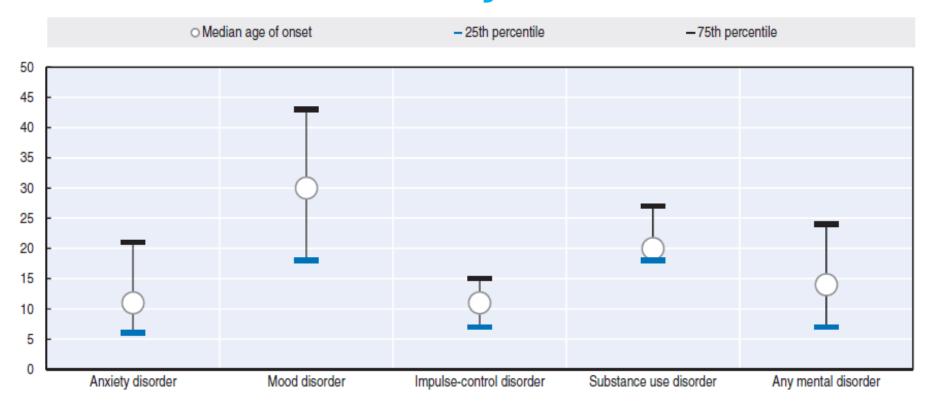
### The social determinants of mental health and disorder: evidence, prevention and recommendations

James B. Kirkbride, Deidre M. Anglin, Ian Colman, Jennifer Dykxhoorn, Peter B. Jones, Praveetha Patalay, Alexandra Pitman, Emma Soneson, Thomas Steare, Talen Wright, Siân Lowri Griffiths





## Most mental disorders first emerge around adolescence or early adulthood



Source: OECD compilation based on Kessler, R. et al. (2005), Archives of General Psychiatry, No. 62, pp. 593-603.



## Why invest in mental health: Human capital

- **Two functions:** Mental health improves quality of life (consumption good) and enhances productivity and human capital (investment good)
- **Skills:** It shapes cognitive skills, decision making, motivation and educational attainment
- **Employment:** Preventing and treating symptoms enhances lifetime productivity, employability and earnings
- Policy implication: Mental health is more than a clinical matter -it has broad social and economic impacts

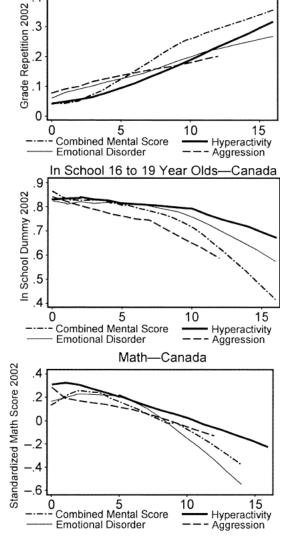


## Mental health as human capital

Grade Repetition—Canada

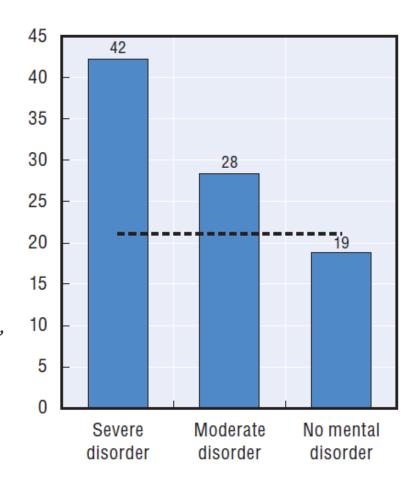
Impact of child mental health scores on educational outcomes (Curry & Stabile, 2007)

Data: Canadian National Longitudinal Survey of Children and Youth (NLSCY)



% absent from work in past 4 weeks, 21 EU countries

Source: OECD (2012), Sick on the Job? Myths and Realities about Mental Health and Work.





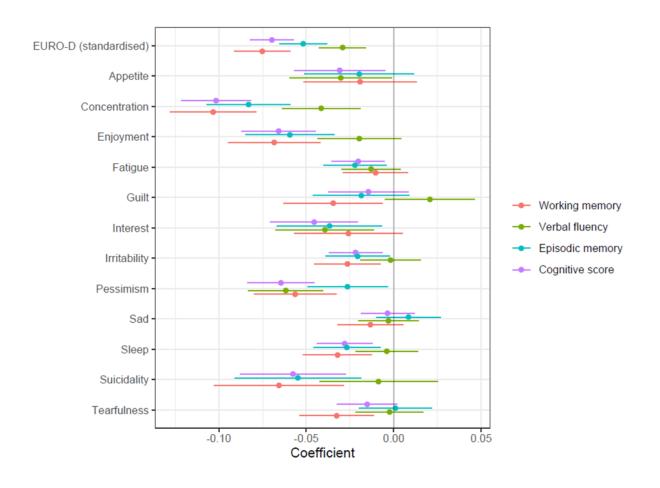
### American Journal of Epidemiology

The impact of depressive symptoms on cognitive function in early old age: A longitudinal fixed-effect study (in press)

Vahé Nafilyan, Augustin de Coulon, Mauricio Avendano



## Depressive symptoms accelerate cognitive decline in older Europeans



Source: SHARE data, aged 50-64, 2010-2018

## The mental health and poverty cycle



Saba, 2021, adapted from Lund et al, The Lancet, 2011

United Nations



#### **General Assembly**

Distr.: General 16 July 2024

Original: English

A/79/162

Report of the Special Rapporteur on extreme poverty and human rights, Olivier De Schutter

The burnout economy: poverty and mental health

RESEARCH



Science

#### **ECONOMICS**

Poverty, depression, and anxiety: Causal evidence and mechanisms

Matthew Ridley, Gautam Rao, Frank Schilbach\*, Vikram Patel





### **Outline**

- 1. A public health approach to mental health what it means and why it matters
- 2. Public policies and mental health four case studies
- 3. Conclusion and implications

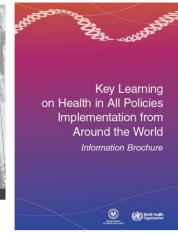


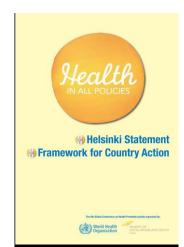


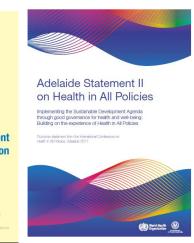
## How can policies impact mental health?

- Policies across all sectors of government can influence population mental health, i.e., early childhood, education, employment, long-term care, environment
- The same standards used in health care should apply to other policies
- We need to demonstrate which nonhealth policies improve mental health – and which do not











### American Journal of Epidemiology

JOURNAL ARTICLE

ACCEPTED MANUSCRIPT

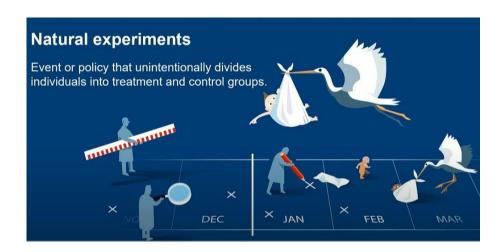
## Producing change to understand the social determinants of health: the promise of experiments for social epidemiology

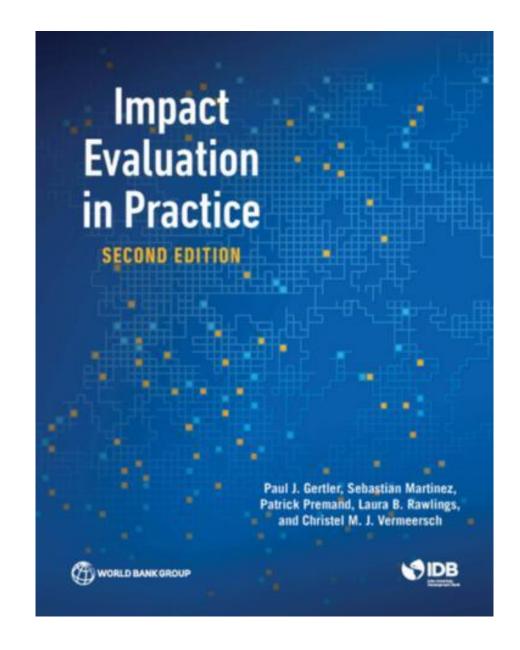
Lisa F Berkman ▼, Mauricio Avendano, Emilie Courtin

American Journal of Epidemiology, kwac142,

https://doi.org/10.1093/aje/kwac142

Published: 09 August 2022 Article history ▼





### Four case studies

- **1. Early life education :** The long-run impact of compulsory schooling laws
- 2. Employment: The impact of state pension age reforms on women's mental health
- 3. Long-term care: the impact of policies that support 'ageing in place' on mental health in older age
- **4. Digital health in higher education:** impact of digital technologies on vulnerable student's mental well-being and educational outcomes



### Four case studies

- **1. Early life education :** The long-run impact of compulsory schooling laws
- 2. Employment: The impact of state pension age reforms on women's mental health
- 3. Long-term care: the impact of policies that support 'ageing in place' on mental health in older age
- 4. Digital health in higher education: impact of digital technologies on vulnerable student's mental well-being and educational outcomes





Contents lists available at ScienceDirect

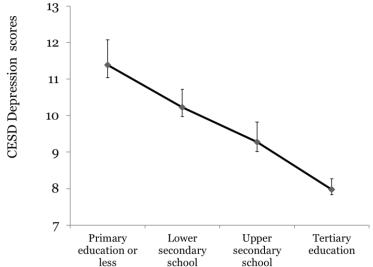
#### Journal of Public Economics

journal homepage: www.elsevier.com/locate/jpube



## Does longer compulsory schooling affect mental health? Evidence from a British reform

Mauricio Avendano<sup>a, b</sup>, Augustin de Coulon<sup>c, d, e</sup>, Vahé Nafilyan<sup>c, d, f,\*</sup>



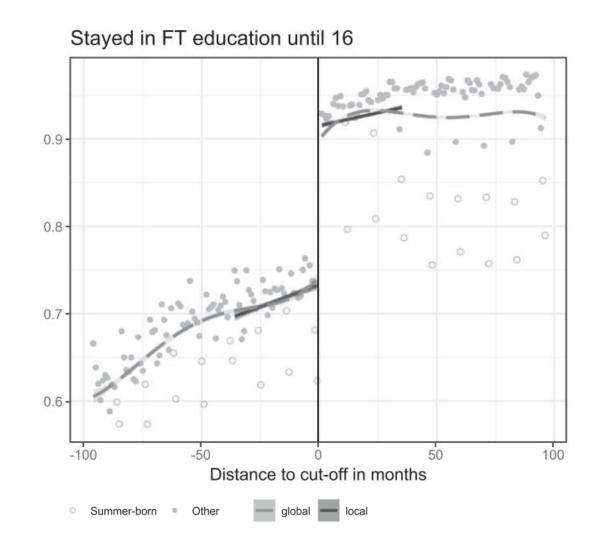
- School leaving age was raised
   1972 in England and Wales
- Children born before 1<sup>st</sup>
   September 1957 could leave school when they turned 15, those born after when they turned 16
- Affected about 25% of the cohort



Source: Constances study, France, 2016

## Fuzzy Regression Discontinuity Design (FRD): Law increased probability of leaving school at age 16

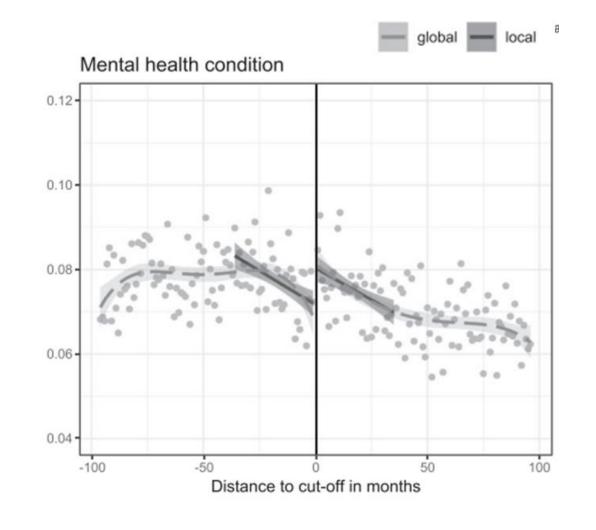
- Compulsory schooling laws generate discontinuity in years of schooling at the threshold
- Law increase probability of staying at school until age 16





## Impact of compulsory schooling law on mental health condition in adulthood

- Compulsory schooling law increased probability of reporting mental health condition age in adulthood
- A year of extra schooling increases probability of a mental health condition by 3.9 percentage points





### Long-term effects of compulsory schooling on physical, mental and cognitive ageing: a natural experiment

Emilie Courtin, <sup>1</sup> Vahe Nafilyan, <sup>2</sup> Maria Glymour, <sup>3</sup> Marcel Goldberg, <sup>4,5</sup> Claudine Berr, <sup>6</sup> Lisa F Berkman, <sup>1</sup> Marie Zins, <sup>4,5</sup> Mauricio Avendano <sup>7,8</sup>

- The Berthoin reform raised the minimum school leaving age from 14 to 16 years in 1959
- All individuals born after the 1st of January 1953 had to stay two years longer in school

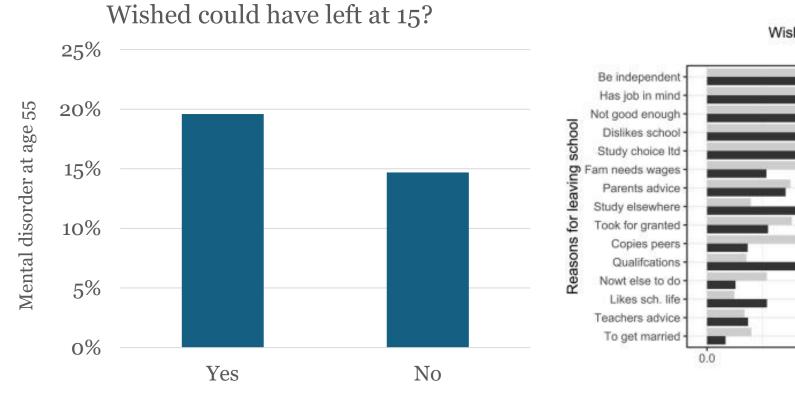


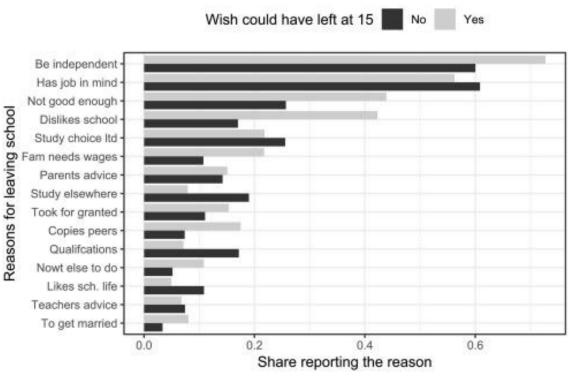
Jean Berthoin

	Men				Women			
	β	95% CI	OR	95% CI	β	95% CI	OR	95% CI
Cognitive score	0.15	0.06 to 0.24	1.81	1.26 to 2.66	-0.01	-0.13 to 0.12	0.84	0.60 to 1.13
CES-D score	0.22	-0.73 to 1.17	1.05	0.83 to 1.32	1.52	0.33 to 2.71	1.27	1.05 to 1.54
Hand grip strength	0.07	-0.88 to 1.02	1.02	0.82 to 1.27	-0.73	-1.51 to 0.05	0.07	0.01 to 1.04
Finger tapping	-0.55	-1.95 to 0.85	0.89	0.65 to 1.21	0.05	-1.37 to 1.47	1.30	0.86 to 1.99
Walking speed	-0.01	-0.05 to 0.02	0.74	0.53 to 1.02	0.02	-0.02 to 0.06	1.04	0.76 to 1.43



## Impact of compulsory schooling law on mental health condition in adulthood







### Four case studies

- 1. Early life education: The long-run impact of compulsory schooling laws
- 2. Employment: The impact of state pension age reforms on women's mental health
- 3. Long-term care: the impact of policies that support 'ageing in place' on mental health in older age
- 4. Digital health in higher education: impact of digital technologies on vulnerable student's mental well-being and educational outcomes



#### Health **Economics**

RESEARCH ARTICLE Open Access

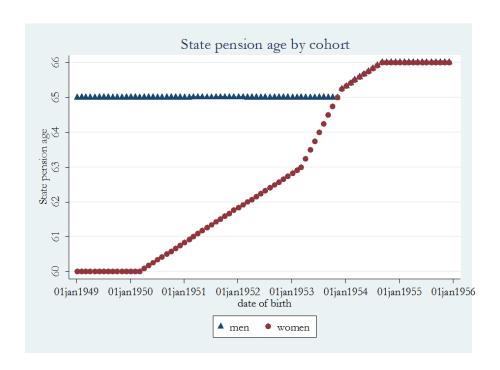


Later retirement, job strain, and health: Evidence from the new State Pension age in the United Kingdom

Ludovico Carrino Karen Glaser, Mauricio Avendano

Health Economics. 2020;29:891–912.

- Pension Act 1995 (also 2011 and 2014)
- Affected women born on or after **April** 1950
- State Pension Age (SPA) increases since May 2010



How does the increase in the state pension age influence the mental health of older women?



## Did women's mental health change because of the UK state pension reform?

Meryl Streep



**Born in 1949** 

When turning **60** (in July 2009) she is ABOVE SPA and can claim a pension

Isabelle Huppert



**Born in 1953** 

When turning 60 (2013) she is BELOW SPA and cannot claim a pension until turning 63 (2016)

Theresa May

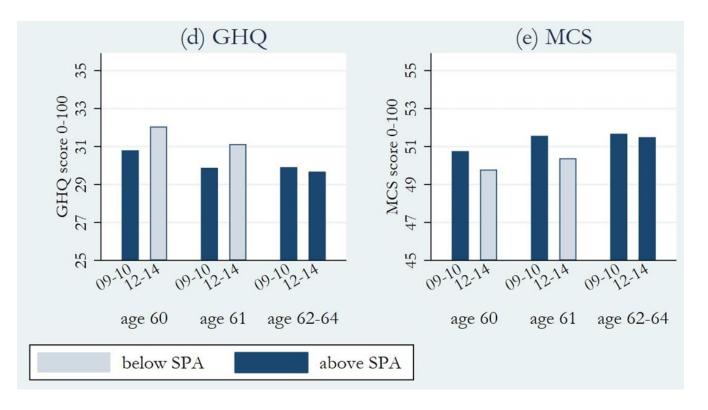


**Born in 1956** 

When turning 60 (in oct 2016) she is BELOW SPA and cannot claim a pension until turning 66 (2022)

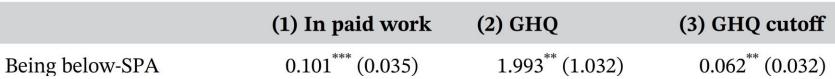


# Women affected by the pension reform had worse mental health than women who could retire at age 60



Working past 60 due to reform

→ +6.2 pts in serious depressive
symptoms



### Four case studies

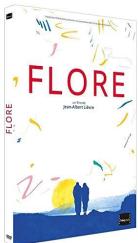
- 1. Early life education: The long-run impact of compulsory schooling laws
- 2. Employment: The impact of state pension age reforms on women's mental health
- 3. Long-term care: the impact of policies that support 'ageing in place' on mental health in older age
- 4. Digital health in higher education: impact of digital technologies on vulnerable student's mental well-being and educational outcomes



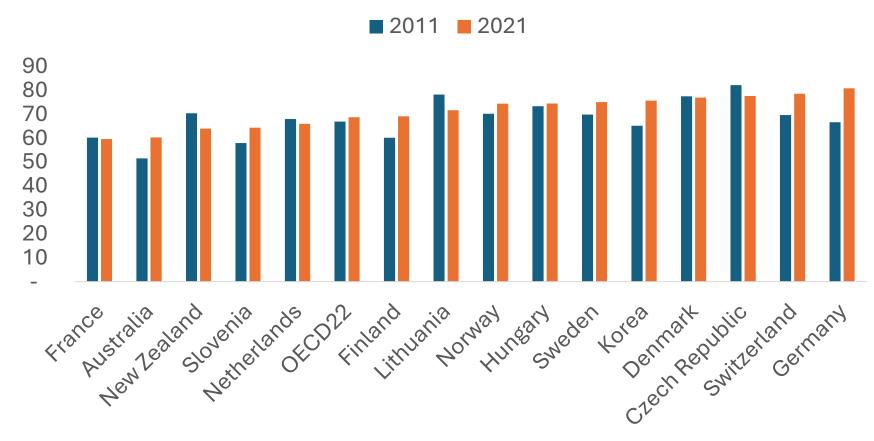
## Can home-based care policies improve mental health in later life?

#### Ageing in place





### Share of long-term care provided at home





## Health Economics

SPECIAL ISSUE PAPER 🙃 Open Access 💿 👣





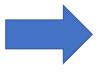
#### There Is No Place Like Home: The Impact of Public Home-Based Care on the Mental Health and Well-Being of Older People

Ludovico Carrino X. Erica Reinhard, Mauricio Avendano

Health Economics, 2025; 34:1085-1102 https://doi.org/10.1002/hec.4948

Legislation on eligibility rules

Index reflecting probability of being eligible for home-based care



Survey of Health, Ageing & Retirement in **Europe (SHARE)** 

- 7 waves (2004-2016)
- Ages 65 and older
- Belgium, Germany, France and Spain
- 24,857 observations

## **IMPACT OF HOME-BASED CARE ON MENTAL WELL-**BEING -0.25 -0.15 -0.05 0.05 0.15 SEVERE DEPRESSIVE SYMPTOMS **FELT LONELY** CASP ABOVE MEDIAN



### Four case studies

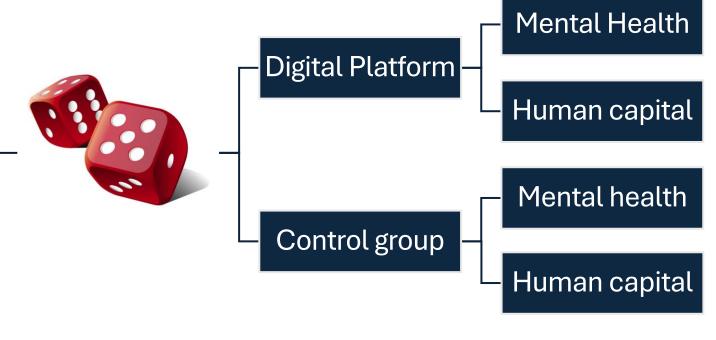
- 1. Early life education: The long-run impact of compulsory schooling laws
- 2. Employment: The impact of state pension age reforms on women's mental health
- 3. Long-term care: the impact of policies that support 'ageing in place' on mental health in older age
- **4. Digital health in higher education:** impact of digital technologies on vulnerable student's mental well-being and educational outcomes



## Can self-help digital technologies improve mental health and education? A randomised experiment













Impact of assignment to Youth Well-being digital platform on depression-anxiety score at 3 months,

Colombia (n=9,719) -0.053\*\* PHQ-ADS>=30 -0.033PHQ9>=15 .04 -0.039\* GAD7>=15 Density -0.039\*.01 PTSD>=4 -10 10 20 30 40 PHQ-ADS (score)

Digital platform shifts distribution of depression and anxiety symptoms to the left, and reduces severe cases by 5.3 percentage points



LATE estimates (β<sub>hat</sub> ± 95% CI)

## What lessons do these case studies offer for a public health approach in Switzerland?

- Policies that shape social risk factors can profoundly influence population mental health
- Policy effects are often long-lasting –reforms should consider mental health consequences
- Population-level interventions can shift the distribution of symptoms and help prevent mental disorders
- Mental health investments can strengthen human capital (education, employment, cognitive function)



## Conclusion and implications

- Mental well-being matters at every life-transition: childhood → adolescence, school → work, retirement → ageing
- Policies affecting these transitions profoundly shape life-time mental health risk
- More than Medicine: mental health underpins human capital education, employment, and cognitive function
- Health systems often focus on severe illness: public health must shift population risk and prevent mental illness
- Every area of public policy offers an opportunity to shift risk,
   prevent and improve the mental health of populations





